

**Amendments to the Claims:**

This listing of claims will replace all prior listings of claims in the application:

**Listing of claims:**

1. (Currently amended) A method for modeling cable loss for a cable plant, the method comprising:
  - identifying a service to be provided over the cable plant;
  - selectively entering at least one value corresponding to at least one parameter of the cable plant;
  - on entering each of the at least one value, determining whether an estimated cable loss for the cable plant is capable of providing the service based on all of the entered at least one value and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant; and
  - displaying the estimated cable loss for the identified service.
2. (Previously presented) The method of claim 1, wherein determining the estimated cable loss comprises calculating the cable loss based on all of the entered at least one value.
3. (Original) The method of claim 1, wherein displaying the estimated cable loss comprises comparing the estimated cable loss with a threshold value and using a first color when displaying the estimated cable loss above the threshold and a second color when displaying the estimated cable loss below the threshold.
4. (Previously presented) The method of claim 1, wherein determining the estimated cable loss comprises:
  - calculating a first cable loss based on a cable gauge and cable length for each span;

calculating a second cable loss associated with at least one bridge tap based on at least one of bridge tap placement and length;

calculating a third cable loss associated with changes in gauge between cables in the cable plant; and

adding the first, second and third cable losses.

5. (Original) The method of claim 4, wherein calculating the second cable loss comprises:

determining entered length and placement values for the bridge tap; and

calculating the second cable loss using a formula based on at least one of length and placement of the bridge tap.

6. (Previously presented) The method of claim 4, wherein calculating the second cable loss comprises:

for bridge taps of greater than a selected length, calculating a cable loss based solely on the placement of the bridge tap; and

for bridge taps less than the selected length, calculating a cable loss based on the placement and length of the bridge tap.

7. (Original) The method of claim 4, wherein calculating the second cable loss comprises assigning a fixed cable loss for a bridge tap of unknown position.

8. (Previously presented) The method of claim 4, wherein calculating the third cable loss comprises assigning a cable loss value equal to a number of gauge changes times a selected cable loss.

9. (Currently amended) A method for modeling cable loss for a cable plant, the method comprising:

identifying a service to be provided over the cable plant;

selectively entering a first set of values corresponding to cable spans of the cable plant;

selectively entering a second set of values corresponding to bridge taps of the cable plant; and

on entering each one of the first and second set of values, calculating component loss values for each of the cable spans and the bridge taps based on at least the entered first and second set of values and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant;

combining the component loss values for the cable spans and the bridge taps to generate an estimated cable loss and determine if the identified service can be provided; and

displaying the estimated cable loss for the cable plant providing the service.

10. (Original) The method of claim 9, wherein identifying a service comprises identifying at least one of HDSL2 and HDSL4.

11. (Original) The method of claim 9, wherein displaying the estimated cable loss comprises displaying the estimated cable loss on the same screen of a graphical user interface used to selectively enter at least some of the first and second set of values.

12. (Previously presented) The method of claim 9, wherein calculating the component loss value for the bridge tap comprises selecting a formula based on the bridge tap length.

13. (Currently amended) A tool for modeling cable loss for a cable plant, the tool comprising:

means for identifying a service to be provided over the cable plant;

means for selectively entering at least one value corresponding to at least one parameter of the cable plant;

means, communicatively coupled to the means for identifying and the means for selectively entering, for determining an estimated cable loss for the cable plant providing the service on entry of the values based on all of the entered at least one value and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant; and

means, communicatively coupled to the means for determining, for displaying the estimated cable loss for the identified service to determine if the identified service can be provided over the cable plant.

14. (Currently amended) A tool for modeling cable loss for a cable plant, the tool comprising:

means for identifying a service to be provided over the cable plant;

means for selectively entering a first set of values corresponding to cable spans of the cable plant;

means for selectively entering a second set of values corresponding to bridge taps of the cable plant;

means, communicatively coupled to the means for identifying and the means for selectively entering the first set of values and the means for selectively entering the second set of values, for calculating component loss values for each of the cable spans and the bridge taps based on at least the entered first and second set of values and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant;

means, communicatively coupled to the means for calculating, for combining the component loss values for the cable spans and the bridge taps to generate an estimated cable loss and determine if the identified service can be provided; and

means, communicatively coupled to the means for combining, for displaying the estimated cable loss for the cable plant providing the service.

15. (Currently amended) A machine readable medium having instructions stored thereon for implementing a method for modeling cable loss for a cable plant, the method comprising:

identifying a service to be provided over the cable plant;

selectively entering at least one value corresponding to at least one parameter of the cable plant;

on entering each of the at least one value, determining whether an estimated cable loss for the cable plant is capable of providing the service based on all of the entered at least one value and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant; and

displaying the estimated cable loss for the identified service.

16. (Previously presented) The machine readable medium of claim 15, wherein determining the estimated cable loss comprises calculating the cable loss based on all of the entered at least one value.

17. (Previously presented) The machine readable medium of claim 15, wherein displaying the estimated cable loss comprises comparing the estimated cable loss with a threshold value and using a first color when displaying the estimated cable loss above the threshold and a second color when displaying the estimated cable loss below the threshold.

18. (Previously presented) The machine readable medium of claim 15, wherein determining the estimated cable loss comprises:

calculating a first cable loss based on a cable gauge and cable length for each span;

calculating a second cable loss associated with at least one bridge tap based on at least one of bridge tap placement and length;

calculating a third cable loss associated with changes in gauge between cables in the cable plant; and

adding the first, second and third cable losses.

19. (Previously presented) The machine readable medium of claim 18, wherein calculating the second cable loss comprises:

determining entered length and placement values for the bridge tap; and

calculating the second cable loss using a formula based on at least one of length and placement of the bridge tap.

20. (Previously presented) The machine readable medium of claim 18, wherein calculating the second cable loss comprises:

for bridge taps of greater than a selected length, calculating a cable loss based solely on the placement of the bridge tap; and

for bridge taps less than the selected length, calculating a cable loss based on the placement and length of the bridge tap.

21. (Previously presented) The machine readable medium of claim 18, wherein calculating the second cable loss comprises assigning a fixed cable loss for a bridge tap of unknown position.

22. (Previously presented) The machine readable medium of claim 18, wherein calculating the third cable loss comprises assigning a cable loss value equal to a number of gauge changes times a selected cable loss.